EVALUATION OF PUBLIC REPORTING

on Hospital Patient Satisfaction in Rhode Island




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Evaluation of Public Reporting on

Hospital Patient Satisfaction in Rhode Island

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Executive Summary

This evaluation report provides a comprehensive assessment of the impact of public reporting of hospital patient satisfaction. The major goal of the evaluation is to understand the response of hospitals to implementation of one aspect of the 1998 state legislation (General Laws of Rhode Island, Section 23-17.17) that requires the reporting of quality performance measures by all licensed health care facilities in Rhode Island. Specifically, the evaluation examines the impact of public reporting on hospital quality improvement activities before, during and after the release of the first Public Report on hospital patient satisfaction in 2001. It also provides a preliminary review of website activity in response to the posting of the first Public Report by the Rhode Island Department of Health.

The report relies on three data sources: interviews, a focus group, and website activity. Individual interviews were conducted with a total of 42 hospital staff at the 13 hospitals that were included in the first Report. Public relations executives at general hospitals were convened for a focus group on dissemination issues. Website activity was tracked, and a pilot web-based survey was deployed. Highlights of results of these endeavors are summarized below.

- Overall, this study clearly shows that the statewide public reporting process had a considerable impact on quality improvement activities in both general and specialty hospitals in Rhode Island.

- Hospitals used both the Pilot and Public Report survey results to confirm and strengthen existing quality improvement initiatives. For most hospitals, data from the surveys helped to identify new opportunities for quality improvement, thus prompting new initiatives. The most frequently cited initiatives were Admission Process and Patient Education.

- Hospital respondents reported strong support and leadership from senior level staff for quality improvement.

- Most hospitals have taken a decentralized approach to quality improvement with each individual department responsible for its own quality improvement plan. However, most have a centralized structure for monitoring and tracking quality improvement progress.

- The statewide survey and reporting process was perceived positively by hospitals. Overall, respondents viewed both the survey and the presentation of the results as fair and unbiased.

- The Pilot project was perceived as critical to the process, as it permitted the hospitals to make improvements prior to the collection of information that would be publicly released.

- Concerns articulated about the statewide process included the shift to a different vendor for the next round of reporting and a change made in the report format, designed as a clarification, that occurred just prior to publication.

- ❖ Generally, respondents perceived that the Public Report did not capture the public's attention and that media attention on the Report was short-lived.

The evaluation report also presents a number of recommendations, including:

- ❖ Expanding efforts for wider dissemination of the Report to the public;
- ❖ Examining variation of scores among hospitals over time to ensure that real differences are represented; and
- ❖ Convening a meeting of all the hospitals to address common areas for improvement shared by the hospitals (e.g., emergency department).

I. BACKGROUND AND PURPOSE

A. History of Hospital Public Reporting and Evaluation

Although hospitals across the country measure and report patient satisfaction internally, few public reports of hospital patient satisfaction are available. A recent review identified nine states, cities, or regional areas that publicly report comparative data on hospital patient satisfaction (Barr and Banks, 2002). The need to standardize the measure of patient satisfaction in order to have comparative data is one reason for the lack of public reporting data. Another may be the reluctance of hospitals to be placed in a comparative position vis-à-vis other local area hospitals (Benko, 2003).

No evaluations of public reporting on hospital patient satisfaction have been identified. However, following the release of patient satisfaction survey data to hospitals and the public in Victoria, Australia, the Department of Human Services obtained feedback from hospitals "…on the extent to which the survey results had been used as a basis for implementing any changes within the hospital" (Draper, et al., 2001: 466). Results indicated that some changes had been made in the areas that were easiest to quantify, but that hospitals needed the data at the level of care delivery in order to identify and implement system changes.

Several evaluations of consumer or provider responses to public reports of clinical measures suggest that there has been relatively little impact on the patients' selection and use of hospitals (Mukamel and Mushlin, 2001), although small effects on using high quality cardiac surgeons in New York State were detected (Mukamel and Mushlin, 1998). A recent evaluation of the impact of a public report on hospital performance in Wisconsin found that, despite more negative attitudes about the validity of the public report, hospitals involved in public reporting were significantly more likely to report improvement activities in the areas included in the public report than were two comparison groups of hospitals not involved in public reporting (Hibbard, et al., 2003). A study of hospital CEOs in Pennsylvania and New Jersey evaluated the extent to which publicly reported performance information was used in making changes affecting marketing, governance, and patient care for cardiac surgery (Bentley and Nash, 1998); findings showed that hospitals did use this information in developing new approaches in all three areas. Following the public release of a report on the quality of obstetric care in hospitals in Missouri, Longo, et al. (1997) found that, one year later, half the hospitals had planned or instituted programs they were lacking before the public report (e.g., nurse educator for breast-feeding) and that clinical indicators that had been low were improved. Similarly, a case study analysis of Cleveland hospitals found that hospitals used data from the Cleveland Health Quality Choice performance reports to develop programs directed at decreasing mortality rates, cesarean section rates, and lengths of stay (Rosenthal, et al., 1998). Based on interviews with 39 CEOs, findings from the California Hospital Outcomes Project (CHOP) indicate wide dissemination of the public report and data within the hospitals; although some areas for improvement were identified, little use was made of the data to directly affect patient care for acute myocardial infarction (Rainwater, et al., 1998). Thus, the data on the impact of public reporting on hospital quality improvement provide a somewhat mixed picture.

B. The Setting for Public Reporting in Rhode Island

Legislation. In 1998, the Rhode Island State legislature enacted laws to require public reporting of quality performance measures by all licensed health care facilities in the State. The legislation had two major goals: public accountability and quality improvement (QI). The law also gave the responsibility for implementing the public reporting program to the State Department of Health (HEALTH). It specified that implementation should occur with the advice of a Steering Committee composed of state legislators, as well as representatives of key stakeholders. They include: "state legislators, state department directors, hospitals, other licensed facilities/providers, medical and nursing professions, business community, organized labor, consumers, health insurers, health plans, and other parties committed to health care quality" (General Laws of Rhode Island, Section 23-17.17). This representation includes the Hospital Association of Rhode Island (HARI) and other professional organizations. For each setting of care, a Measures Subcommittee was or will be established to make recommendations on the quality measures that should be publicly reported for that setting, the standardized method for collecting the data, and the format for reporting the data. Importantly, the hospitals supported the legislation and its goals. Thus, the stage was set for widespread collaboration on implementing the public reporting program (Barr, et al., 2002). The initial focus of the program was on hospital patient satisfaction, followed by hospital clinical performance, and then nursing home clinical performance. To date, public reports have been released in these three areas. A second report on hospital patient satisfaction is scheduled for release in Fall 2003.

Public Report Process. This evaluation focuses on the first Public Report that compared hospitals in Rhode Island on standardized measures of patient satisfaction. The sequence of events leading up to the Public Report release included: selection of the vendor; decisions about the survey instrument; patient sample selection by the vendor; development of the reporting format by the Public Release Work Group of the Measures Subcommittee; a Pilot survey, with each hospital's data reported only to that hospital; the Public survey, with the data presented in a comparative format; and the release of the Public Report in November 2001 (Barr, et al., 2002). A total of 13 hospitals were included in the Public Report, 11 general hospitals and two specialty hospitals. Because of the structure established by the legislation, major roles in the process were played by HEALTH, leading the effort, and by HARI, contracting with the vendor on behalf of the hospitals. Further, HEALTH contracted with Qualidigm, Connecticut's Medicare quality improvement organization, to provide technical expertise and support to the process.

C. The Evaluation Project

The overall purpose of this evaluation is to understand the impact of statewide public reporting of hospital patient satisfaction in Rhode Island. Full evaluation of the Public Report requires assessing both the public accountability and QI goals of the legislation. This evaluation focuses primarily on the goal of QI in hospitals. It begins to provide information about the other goal, but public accountability cannot be fully evaluated until there is a mechanism for obtaining feedback from consumers and key stakeholders following the release of the Public Report. Specific objectives of this first evaluation are: (1) To describe hospital quality improvement in relation to public reporting of patient satisfaction; and (2) To track HEALTH website activity in response to posting the first Public Report in order to explore the general impact of the Report.

II. METHODS

A. Data Collection

Data Sources. Three data sources were used for the evaluation: interviews; a focus group; and the HEALTH website. The prime source of data was retrospective interviews with key hospital staff focusing on QI approaches and activities before, during, and after the Public Report. The evaluation results rely primarily on the qualitative analysis of interview data. Also, a focus group of public relations executives from general hospitals in Rhode Island was convened to address more fully issues related to the dissemination of the Public Report, both internally to staff as well as to patients and the community. The third data source was the HEALTH website. An electronic tracking system documented the volume of online activity for the files related to hospital patient satisfaction, and the evaluation monitored use of the Public Report and the Technical Report. Also, an online survey was designed to query users when the report was downloaded, and results of the web survey pilot test are reported.

Interviewing. Two experienced interviewers conducted the interviews approximately one year after release of the Public Report on patient satisfaction in hospitals. Interviews occurred in two time periods: September-October 2002, with staff at 11 general hospitals with a Qualidigm consultant; and December 2002-January 2003, with staff at two specialty hospitals with a Qualidigm Senior Scientist. (See Appendix B for a listing of hospitals in Rhode Island that were included in the Public Report and participated in this evaluation study.) The study used a purposive sample for the interviews, defined by four key hospital positions (Chief Executive Officer, Medical Director, Nurse Executive, Patient Satisfaction Coordinator). The intention was to capture multiple perspectives from hospitals, including top administration, clinical areas, and the person most familiar with day-to-day operation of the patient satisfaction survey. HARI identified key staff at each of the 13 participating hospitals. The Senior Vice President of HARI sent a letter by email, informing them of the evaluation effort and encouraging their participation in the interview process. Of the 52 positions identified, a total of 42 people were interviewed at the 11 general and two specialty hospitals. This sample includes: all 13 CEOs, eight Medical Directors, eight Nurse Executives, and all 13 Patient Satisfaction Coordinators. Table 1 shows the interview status by position, illustrating the number of completed interviews. The overall response rate was 81% with at least three positions interviewed at each hospital, except one, where only two positions were interviewed (mean=3.2 respondents per hospital).

Table 1. Summary of Interview Status by Position in Hospital

Interview Status	**Hospital Position**			
	CEO	Medical Director	Nurse Executive	Patient Satisfaction Coordinator
Completed	13 (100%)	8 (61.5%)	8 (61.5%)	13 (100%)
Refused/unable to contact	0	5	4	0
Cancelled/unable to reschedule	0	0	1	0

Qualidigm staff developed a semi-structured interview protocol with the consultant who was involved in the design and development of the Rhode Island initiative and who has expertise in both public reporting and qualitative research and evaluation methods. The protocol was designed to elicit responses concerning: (1) hospital QI activities following the Pilot and the first Public Report; (2) hospital QI structure and barriers to QI initiatives; and (3) the statewide survey and reporting process, including dissemination of data within each hospital and to the public. Most interviews (70%) were completed by telephone; the others were conducted in person at the office of the interviewee. No differences in the amount of time spent or in the responsiveness of those interviewed were noted by the interviewer using these two methods. In three hospitals, two persons were interviewed at the same time, for the convenience of the respondents.

Interviews were tape recorded to preserve responses in their entirety and to capture the richness of answers; in four instances, the recording equipment was non-functional, and these interviews were recorded by hand. In addition, an interviewer's summary was available for the majority of the interviews and was used as a reliability check on the general direction of the findings. Because the interview protocol was semi-structured, and respondents had different perspectives and experiences regarding patient satisfaction and QI, there was some variation in the wording and sequence of questions put to each respondent. Also, because the interviews were semi-structured, respondents voluntarily answered questions in their own way, rather than having predefined response categories that can be compared directly for all respondents. The interview asked respondents to report on their QI activities retrospectively at three points in time: before the Pilot survey, after the Pilot, and after the Public Report. Studies of retrospective methods of assessing change through self-reports have shown that a more accurate picture of change may result by asking the respondents retrospectively their self-assessment before an intervention and then after, rather than an actual pre-intervention pretest (Howard, et al., 1979; Levinson, et al., 1990; Skeff, et al., 1992; Umble, et al., 2000). Although our protocol did not ask specifically for pre-Public Report and post-Public Report ratings of change in QI activities, these earlier studies support the approach of asking about change over time during the "post" period.

B. Coding and Analysis of Interviews

Data Processing and Coding. All interview data were processed and analyzed at Qualidigm. The audiotapes were transcribed to electronic format and stored under lock and key. The hand-recorded responses were typed by the interviewer and transmitted electronically to become part of the transcript database. The interviewers reviewed the transcripts for accuracy and completeness. A preliminary coding system was devised *a priori* by the consultant, based on the interview protocol, prior to the review of the transcripts. After review of 15 transcripts randomly selected by the researchers, the team developed additional codes based on themes that emerged from the text. The codes were applied to the transcripts using QSR International NVivo software for electronic storage and retrieval (QSR International, 1999-2002; Miles and Huberman, 1994). Coding reliability was tested using the revised coding system. Coder #1 randomly selected five transcripts for coding, and Coder #2 coded the same five transcripts; discrepancies between coders were reviewed and discussed with the consultant, resulting in a refinement to the existing list of codes. Coder #1 then applied the codes to the remaining transcripts, and Coder #2 coded a 20% random sample of the transcripts. The two sets of coded

transcripts were compared, and discrepancies were counted where one coder entered a code and the other did not, or where the coders disagreed on the entered code. This process yielded a high degree of reliability (agreement rate = 93%). Discrepancies were resolved by consensus among the two coders and the consultant. In the few instances of undercoding, the "missing" codes were applied to the electronic transcripts.

Qualitative Analysis. The first step in the analysis was data synthesis, using an iterative approach to move from specific code categories to more general themes (e.g., QI support). As this step in the analysis proceeded, further review of the transcripts and codes resulted in collapsing some minor categories into a single code and adding new categories. This process of "functional reduction" identified infrequent, duplicative, or irrelevant codes that should be combined, condensing selected code categories and adding new ones (Becker, 1998), which resulted in the final coding system. Next, the code categories were applied to specific questions in the interview (e.g., who was QI lead) to incorporate the responses into the more general themes. From there, clusters of common responses and consistencies in the data were identified to develop a set of generalizations based on the patterns, themes, and differences (Miles and Huberman, 1994).

In the next step of the analysis, specific codes were subsumed under three general questions that guided the analysis of the interview data and the reporting of results:

(1) What is the impact of public reporting of patient satisfaction on hospital quality improvement?
(2) What approaches are hospitals using for QI related to patient satisfaction, and what are the barriers?
(3) What are the perceptions of the statewide survey and reporting process?

When the data analysis focused on QI activities, QI structure, and barriers to QI, the hospital was the unit of analysis, and responses were aggregated within each hospital. When the analysis focused on individual attitudes and concerns about the statewide survey and public reporting process, the individual respondent was the unit of analysis, and responses were aggregated across hospitals (Hibbard, et al., 2003). The analysis assessed the "weight of opinion" on the interview questions, as well as the range of opinions when there were discernible differences. Recognizing that responses were voluntarily given and not always asked directly or in discrete response categories, the analysis sought to identify frequent responses on the same point or theme. The NVivo software was used to check the frequency of responses for specific codes and to help identify responses that did not fit the pre-established coding scheme.

III. RESULTS

A. Impact on Quality Improvement

The interviews probed three areas of QI: QI initiatives, collection and use of data for QI, and the overall impact of the statewide process.

QI Initiatives. The hospitals reported a wide range of QI activities, both in response to the public reporting process and in general. Among the most common areas for improvement are the domains specifically addressed on the patient satisfaction survey (see Figure A). For example, many of the hospitals reported improvement initiatives related to the admission process (including timeliness and flow), patient education, food service, nursing, and cleanliness and comfort of the patient environment, as described in these interview quotes.

> *Admitting*
> *"One of the things that the… team tried to do [since] there wasn't much they could do about the actual wait time… [was to try] to manage the experience of waiting."*
>
> *Food Service*
> *"We've worked with the dietary department to provide [information] on the tray, so that if the patient isn't happy with their meal, or the temperature of the food, or whatever it is… they can call so somebody from dietary can come up and address that concern right away…"*
>
> *Nursing*
> *"We added a staff person who was in a supportive function on that unit to make rounds on patients more frequently. They needed help with little things, like where their water was, to help with things nurses weren't able to get to on time, like a unit assistant type. We added one person on alternate shifts."*

Figure A. Most Frequently Reported Hospital Quality Improvement Initiatives

Survey Domains	Other Initiatives
Admission Process	Customer Service Focus
Patient Education	Emergency Department
Food Service	Clinical Conditions
Nursing	Hospital Systems
Cleanliness and Comfort	

In addition to these specific areas of focus, most hospitals mentioned other QI initiatives related to the overall issue of patient satisfaction as well as to other quality measures (see Figure A). The most frequently mentioned activities targeted customer service, the emergency department, clinical conditions, and hospital systems, such as infection control. Most of the hospitals have

worked on one or more initiatives that have a customer service orientation. Nearly half of the hospitals used staff training as a strategy to improve customer service. Other examples include improving accommodations for visitors and family, and improving signage so visitors are better able to make their way around the hospital, as described in these quotes from the interviews.

Customer Service Focus

"They asked folks, 'How can we improve your accommodations for visitors?' And one of the things they found out, they need more chairs. So they went back and they … put more chairs in place. They also found out that people couldn't find their way efficiently around the building, so they [made] changes in terms of putting up instructions, and re-mapping the hospital, and providing information that was more clear to folks."

"I think one of the things we've done coming out of the last report is a more broad-based customer service program. So really as opposed to honing in on some of the specific processes, [we're] really addressing broadly what the expectations of customers are. And at the same time, we've been working on the issue of staff satisfaction, recognizing that it's a foundation for good customer satisfaction."

"From the patient satisfaction data, we've changed the way we do things. For example, every patient is welcomed to the hospital by a member of senior management. Senior management visits every patient at least twice a week…to make sure that everything is going well in their stay…. So I think we're trying to be advocates for ourselves in helping patients understand that we're doing all these things and, at the same time, asking them in real time if they're happy; and if they're not, let's fix it while they're here. We don't get a second chance at this."

"Well, we've taken a look at our environment, and we have done a lot to try to improve it. We've improved our signage, we've put paintings up to try to beautify the hallways, common areas, and the patient care areas… We have done things like putting music on in the hospital… so that it's not quite so stressful… and [we're] warming it up a little bit. We've created expectations… a set of service standards that all employees are supposed to follow… So, for example, we say we don't want patients to wait more [than] ten minutes, whatever the standard is about waiting for their area. If people are waiting more than ten minutes, that should lead to identification of why that's happening and improvement. And our service standards are multi-faceted around communications, attitude, appearance, waiting time; it is a customer standards program and customer service training. And we've worked on many of the amenities in the hospital…telephone…television. We have a hostess cart that comes around to see if patients need anything; newspapers in the morning, things like that."

Another target for improvement by most of the hospitals is the emergency department; these initiatives centered largely on reducing waiting times. Although the survey did not ask patients a question about waiting in the emergency department, it did ask whether the patient was admitted from the emergency department. Hospitals received this information on admitting source from the survey vendor and could view it in relation to patient responses about satisfaction with the hospital admission process to identify and/or confirm the need for improvement in this area.

Emergency Department

"We revamped the whole way we deliver care in the Emergency Room by establishing teams. [It has] done wonders and turned that completely around."

"To be honest, I think what we found was the biggest problem was that most patients in the survey were getting admitted through the Emergency Department and the availability of the right bed at the right time was probably our biggest weakness. And on a short-term basis, we tried to look at that process of expediting that patient from the Emergency Department to a bed."

The majority of hospitals also discussed QI initiatives related to specific clinical conditions (e.g., acute myocardial infarction, congestive heart failure, and pneumonia) or specific types of care (e.g., surgical procedures). About half of the hospitals are working on initiatives to improve specific hospital systems in areas such as: infection control and patient safety, overall patient care management, and other services (e.g., lab, pharmacy). These quotes from the interviews describe examples of the hospitals' activities related to QI in these areas.

Other QI Initiatives

"I think it has been medication safety, because in the last ten months we've been involved with implementing fixes and reviewing all of our processes, so medication safety's a big thing. Our focus is how do we make the environment more safe for [patients] to be in."

"They worked this past year with the right side, wrong side surgery… infection control has been [another area]; we've done a variety of different [initiatives]."

"*[We have focused on] specific high risk, high volume activities for example, surgery, and things like that where … they wanted to look at those high volume diagnoses and …look out for opportunities for improvement… those are clinical…For overall administrative type things, [we looked at] reducing denials, improving admission, outpatient testing admission processes and things like that.*"

Data Collection and Use of Data for QI. Hospitals were asked about participation in QI for patient satisfaction at three time points: prior to the Statewide survey process, after the Pilot survey, and after the release of the Public Report. They reported on the use of an external vendor and/or internal surveys to collect additional data on patient satisfaction (e.g., outpatient areas), and on the use of the survey data in directing and monitoring their QI initiatives. Prior to the

Pilot survey, and in many cases prior to the 1998 state legislation mandating public reporting, all hospitals were involved in some form of patient satisfaction data collection. Over half had used an external vendor to measure satisfaction hospital-wide; others used internal surveys either hospital-wide or for specific areas or departments within the hospital, as shown in the quotes below.

Use of Internal/Homegrown Survey Prior to Pilot

"For a long time we did sort of a homegrown measure and then about six or seven years ago, the contractor was [hired] to do a survey, and I think we only did it once a year. And we… were sort of trying to figure out what to do when this opportunity with the State-mandated survey came along. We recognized the limitations [of our homegrown measure] and we adopted [the state survey]."

"I know they had some homegrown [surveys]. It's from several departments, but nothing psychometrically sound or standardized, not that I know of."

"These were homegrown tools. We didn't have the advantage of having a vendor do a lot of the legwork and compiling the data, and having a database to compare with. However, we did use literature to assist in benchmarking information. Going to [a vendor] was a costly endeavor, however, a huge advantage, and I think the organization probably would have gone to an outside vendor eventually…It's going from a horse and buggy into a motorized vehicle."

Use of Vendor Prior to Pilot

"To be honest with you, it was in place before the statewide patient satisfaction survey…and we had opportunities to improve there, and very aggressively implemented those. So by the time we got to the statewide Pilot project, we were pretty conversant in patient satisfaction instruments and scores. When you're [high] in satisfaction, it's hard to move that score higher, and so all our attention has been to sustaining the improvements. And that's been a challenge for us, we want to make sure we maintain the improvements that we've made."

After the Pilot survey, in which all thirteen hospitals participated, a large majority of the hospitals used data from the Pilot either to confirm prior QI efforts or to identify new areas for QI. They also were monitoring improvement and tracking the data. About half mentioned that the results of the Pilot were actionable, and others noted that the Pilot was critical to QI efforts.

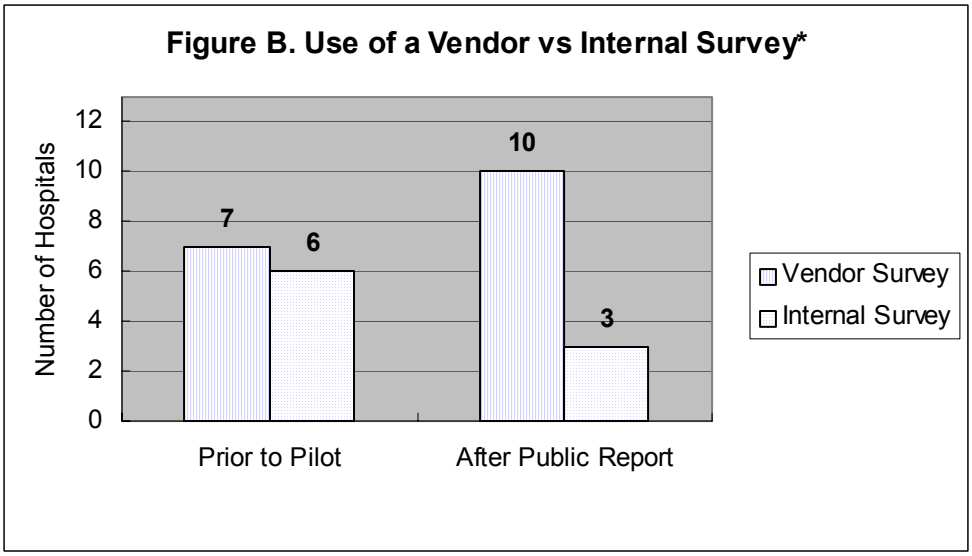
Pilot Survey

"It was the Pilot survey that brought it to our attention. One tends to focus on the areas where they are not doing well rather than those that they are. We wanted to know what needed improvement. This was totally new information to us; it was different data from what we had previously collected."

"I don't know if we would have identified this as an issue without it [the Pilot]; in fact, I really don't believe we would have identified it without this particular survey… It wasn't a specific question at all in our homegrown."

"The Pilot survey served as a nice tool to allow us to focus on something objective where we could say your number was 70 when it should be 80, or it should be 90. The fact that it was going public gave us some internal leverage to reinforce why [we're doing this] other than all the reasons [we gave] until then [as to why] we were saying this was important."

After the Public Report release in Fall 2001, most of the hospitals were using a vendor for interim data collection in addition to the statewide survey; others continued with internal surveys hospital-wide or for specific areas. The use of an external vendor for ongoing surveys increased from seven hospitals before the statewide process began to ten hospitals after the Public Report was released (see Figure B).



**Refers to ongoing surveys in addition to statewide survey*

<u>*On Eliminating Homegrown Surveys*</u>

"For patients we're only using vendor surveys and we're trying very hard not to use any in house or home grown surveys, because if we were to do that, we wouldn't have comparative information."

"We really up until this time had not used a formal, a really formalized survey, we had a lot of surveys that were home grown, so to speak. So at the hospital, each department would develop their own little survey, but we had never really done anything as formal as we did with the initial vendor project."

Similar to the Pilot experience, the majority of the hospitals used Public Report data to initiate new activities; the remainder maintained ongoing QI activities. Most hospitals also used data from either the ongoing vendor surveys or internal studies to monitor the impact of QI activities. The quotes listed below describe these processes.

> *Use of Data*
>
> *"We did look at it and came up with several of the measures that again weren't surprises to us, but this was [the] sort of data that supported what we knew were issues."*
>
> *"We used these results to analyze where our patients told us that we had opportunities for improvement, so that we could develop strategies as part of that service quality initiative."*

Overall Impact of Participation. Considering the increase in QI activities, data collection, and use of data over the period that begins prior to the statewide Pilot survey and ends after the release of the first hospital patient satisfaction Public Report in late 2001, it appears that many hospitals have both strengthened their existing QI initiatives and initiated new ones consistent with the results on both the Pilot and Public Report surveys. While all hospitals participated in the statewide survey process, two dimensions of this participation provide a means to classify hospitals' responses to the statewide survey process: (1) use of the Pilot survey data for QI; and (2) use of a vendor for patient satisfaction data collection after the release of the Public Report.

The following categories describe the hospitals, as shown in Table 2 below:

- *Innovators* – These hospitals used Pilot data to initiate new QI activities and to monitor ongoing QI efforts. They reported that the Pilot initiative had a major impact – either it revealed opportunities for improvement that were previously unknown, or it was a key factor in pushing a QI initiative forward.
- *Continued Existing Initiatives* – These hospitals used Pilot data for ongoing QI activities; no new initiatives were reported based on Pilot survey results.
- *Early and Ongoing Users* – This group of hospitals was using a vendor to measure patient satisfaction hospital-wide prior to the Pilot survey; they continued to use a vendor regularly (e.g., quarterly) for interim data collection between statewide survey cycles to track and monitor the results of QI activities following the release of the Public Report.
- *New Users* – After the Public Report, these hospitals began using a vendor regularly (e.g., quarterly) for interim data collection between statewide survey cycles to track and monitor QI activities.
- N*on-Users* – These hospitals used internal, homegrown surveys prior to the statewide process, and they continued to use internal surveys for interim data collection and monitoring; this approach does not provide comparative data.

Table 2. Relationship between Vendor Survey Use and Initiation of New QI Efforts (N=13)		
Used Vendor Survey After Public Report	**Used Pilot Data for QI**	
	Innovators	Continued Existing Initiatives
Early and Ongoing Users	6	1
New Users	1	1
Non-Users	4	0

As Table 2 illustrates, this classification reveals a major impact based on Pilot data use for QI and vendor use after the Public Report. It suggests that while all of the hospitals participated in the public reporting process, they vary in the stage of development of QI activities at the beginning of this process and in the degree to which they have adopted the statewide approach for their own QI program. The *Early and Ongoing Users* are hospitals that appear to be "ahead of the game" in that they were using a vendor prior to the statewide survey, tracking performance, benchmarking their progress, and comparing data to others; they continued to use this approach. It is interesting to note that even though they had regularly been using vendor surveys that provided benchmarks, almost all were *Innovators* in beginning new QI initiatives based on the statewide survey results, through which they could see not only their own performance but also the performance of identified facilities in the state. Two hospitals became *New Users* of a vendor for interim monitoring bringing the total to nine. All hospitals used the Pilot data in some manner, most for initiating new QI activities.

B. Hospital Quality Improvement Approach

In describing their QI efforts, the hospitals were asked about the leadership structure and decision-making processes for QI program development and implementation, goals for the QI program, sources of support for the QI program, and barriers to QI.

Structure and Process for QI. At most hospitals, at least one interviewee identified executive level staff (e.g., CEO, COO, VP) as the champion for QI. However, there was a lack of consensus on this question, and responses varied within and across hospitals. Many respondents self-identified as the champion, expressing commitment and willingness to be actively involved in the QI process. Responses to the question about who is responsible for leading QI in the hospitals also varied; some identified a position (e.g., QI Director), others a department (e.g., QI Department) or a committee (e.g., Performance Improvement Committee).

CEO as Champion

"Because in the hospital I'm kind of responsible overall for it [quality improvement], I [CEO] go to Quality Committee[s]."

"I [CEO] chair the Quality Council Committee. Our Chief Operating Officer is the staff for the Quality Oversight Committee. I attend all the meetings, all the medical executive committees, … and the Board, and at those we always

review our quality indicators. We have at this hospital a quality initiative going on since the beginning of the year for patient satisfaction, [and] I've been intimately involved with that specific indicator."

"I'd have to say the CEO. He keeps talking about it, incorporating it in the board [meetings], he sets a goal, a target, and he embodies that, you know, he walks the talk. I would say the CEO is an important person. Now, a lot of other people help, but if I had to say a champion, I would say him."

Most hospitals have a hospital-wide QI committee that meets regularly (e.g., monthly, quarterly), and many described separate departments for QI and quality assurance. Yet, most remarked that responsibility for developing and implementing QI plans is decentralized at the individual department level, while monitoring and reporting QI is often hospital-wide (e.g., Quality Council) and goes up through committees to the Board level.

QI Structure

"We have a Department… which is kind of a central repository for all the quality, though it acts as the facilitator, because each of the areas is responsible for their own quality and improving, making plans and reporting to the… Council."

"There is a Quality Department with a Director of Quality and that is the repository of quality information, and initiatives may begin as a result of that. We all participate in quality efforts so if we have ideas that will affect quality of patient care, we try to report those initiatives or efforts up through that committee or that department."

"You know we're very careful to do quality reports for the Board on a regular basis. They hold us accountable to that as they should!"

Goals. The hospitals had definable QI goals to which the QI programs are directed. Respondents detailed three types of goals:

- specific quantitative targets (e.g., "get three stars"; "pass the 90th percentile");
- specific area targets (e.g., improving documentation of patient education; improving the admissions process); and
- general improvement (e.g., improving patient satisfaction; improving customer service).

After the Pilot, specific quantitative targets and specific area targets were mentioned, but the emphasis was on general improvement. Also, after the Public Report, when hospitals had access to the scores of their state counterparts, the emphasis had shifted to specific target areas, derived from the survey data. Also, after the Public Report, fewer respondents mentioned specific quantitative goals.

Sources of Support within the Hospital. To learn about the way QI programs function, respondents were asked for a numerical rating of the support from various sources within the

hospital (i.e., Senior Management, Department Heads/Chiefs of Service, Medical Staff, Nursing Staff, and the Board of Trustees) for QI activities and for use of patient satisfaction data to drive QI. As shown in the quotes below and Table 3, respondents perceived the greatest amount of support from top leadership at the hospitals – the Senior Management and the Board.

Senior Management and Board Support

"One hundred percent support from the Director level."

"I would say that senior leadership in general… I would say that all are definitely advocates for patient satisfaction surveys."

" If you talk to a Board member, they'll tell you, they know what this is all about..."

Table 3. Amount of Support for QI and Patient Satisfaction Data (Average and Range)* from Different Sources in Hospitals

Types of Support	Statistic	Sources of Support				
		Senior Management	Department Heads	Medical Staff	Nursing Staff	Board
For QI Activities	Average	4.5	4.1	3.7	4.1	4.6
	Range	3.3 – 5.0	3.0- 5.0	2.2 – 5.0	3 – 4.7	4.0 - 5.0
For Patient Satisfaction Data for QI	Average	4.6	4.4	3.7	4.1	4.6
	Range	4.0 - 5.0	3.0 – 4.8	2.7 – 4.8	3.4 – 5.0	3.8 – 5.0

**Respondents rated the support from each source using a scale of 1 to 5, with 5 the highest.*

These ratings in Table 3 represent the average support ratings by respondents aggregated across all hospitals and the range of averages across hospitals. While there is variation in the average responses among the hospitals, the overall averages show a clear pattern of greater support from top leadership and somewhat less support from the clinical areas. When respondents were probed about their ratings, they described their reasons, as shown in the quotes listed below.

Ratings of Medical Staff

"Well, the medical staff gets confused with quality improvement and peer review. So it's a touchy area, very sensitive. And when we look at how do we want to improve quality there, they're still skittish about 'well, are we looking at individuals?' And they're just slow to come through the learning curve and they don't have a lot of time to spend…they don't choose to spend a lot of time working on these things because [of] their private practices…I mean I don't think we are a priority for them in terms of how the hospital operates, and you know, everything needs to be easy for them so they can get in and do the job they have to do here, and then go back to their offices."

"I don't find that the medical staff has much of an appreciation of quality improvement as I see it."

"I think the medical staff, because they're not necessarily intimately involved… they don't see the direct impact on them, the individual or their practice; and [they] see it as money that could be spent elsewhere on care probably, rather than service."

In General

"I think the support given to each of these differs on what parameter you're looking at. So I would sense personally that on quality outcome measures that I think they're all very supportive and they're all probably fives. I think that if you look at patient satisfaction elements, I think there's less, not because people think that patient satisfaction is less important; I think it's because people have a lot of problems with the tools being used and what they mean."

In addition to the rating questions, respondents were asked about the resources the hospital provides for QI and their perceived access to senior management around QI issues. Respondents reported that the hospital does provide enough resources in general, and that they do have sufficient access to senior management. Over half noted "organizational commitment" as the impetus for QI.

Access to Senior Management

"Oh, absolutely, absolutely. I'm very blessed with very close relations with the administration of the hospital, the medical staff, with the board of trustees, the chairman, the current chairman of the hospital who sits on the Quality Council. You can't get more access than that, I don't think!"

Barriers. While there appears to be generalized support within the hospitals for QI activities, respondents also reported specific barriers to implementing QI activities. The barriers they described were related to four areas of hospital functioning: internal resources; internal environment; data needs; and external environment.

Although those interviewed said, in response to a question about whether the hospital provided enough resources to QI, that the hospital did so, they nevertheless cited the lack of internal resources, specifically insufficient capital finance and staffing, as barriers. For example, they mentioned funding resources for infrastructure and general needs as problems: the need for finances for capital improvements; staying operational and not having a deficit; and difficulty in prioritizing with limited resources. Staffing issues were also mentioned. About half of the respondents remarked that not having the right staff who are trained and committed to QI is a problem and that there is insufficient time for staff to do all that is expected of them (e.g., collect data), especially with the shortage of nurses. These comments suggest that while there appears to be top-level support and enough resources for the QI activities, there may not be enough resources to implement the solutions in the identified problem areas.

Issues in the internal environment include staff resistance and the need to promote understanding and "buy-in" for the QI program. Although fewer than half of the respondents indicated that there is a problem with staff resistance, those who did so noted a number of examples. They include: difficulties in dealing with unions; lack of staff commitment to QI goals; resistance to change; and the aversion of some staff to being held accountable. The following quotes give a flavor of the kinds of resistance from staff members to QI initiatives described by respondents.

Staff Resistance

"I don't know, it may be enormous resistance. It's not an active resistance to this particular measure; it's just sort of a difficulty with one more thing to add into people's schedules. Because of the way that we have to do it, it typically falls to the ward clerk who isn't a seven-day-a-week person so if that person is not there then it falls to the nursing staff and they don't see it as their responsibility, so it's very difficult to get it done."

"We need to change their attitude in what responsibilities they need to take action on to make it better within their departments. A lot of the things are put back on the quality assurance department [but] that's not where it lies. It lies in each individual within each subspecialty."

Responses indicated that successful QI requires generating and sustaining widespread support for and understanding of QI throughout the hospital, a culture of QI with leadership that fosters QI, and a team approach. Also mentioned were the importance of staff buy-in and the need to educate staff, involve them in committees, and elicit their opinions through an employee survey to determine needs.

Staff Views of QI

"I think the physicians understand that they're a customer; but they also [must understand that they] have customers within the organization, that it's a mutual thing, and that they own a piece of customer satisfaction, and [must consider] how they tend to their patients' needs, how they collaborate with the staff that are attending to the patients' needs. I don't think we're there yet."

"I think people, for example, in nursing management who are accountable for the results and have the responsibility to help staff improve the results may not like it because it's their particular shift that needs to do some work."

Fewer than half the respondents mentioned specific data needs. However, the examples they mentioned provide insight into some of the difficulties for the hospitals in implementing their QI activities and making improvements. Examples include: the need for software; lack of automated data systems; assistance in obtaining the correct data in a timely fashion; help analyzing the data; and help translating the data into meaningful information that can be used at the level where improvements can be made.

Data Needs

"One of the barriers that I believe everybody faces is the ability to abstract the right data to analyze processes."

"We have a lot of data here, but we are not very good at always looking at the data, mostly because of resources."

"I would say the only thing that's limiting my area right now is a lack of integrated automated systems."

Only a few respondents mentioned factors in the hospital's external environment that present obstacles to QI efforts. For example, a few respondents indicated that the multitude of competing priorities (e.g., state and federal regulations) presents a barrier to QI activities. Several commented on the need to work within the framework of reporting requirements, for example, those established with HARI about use of survey results, or having to adhere to the survey and methodological requirements established with the vendor. In general, the respondents did not see the external environment as a major barrier to implementing QI initiatives. Over half saw federal government requirements as an impetus, generally, to QI. Further, those interviewed expressed a clear sense of the areas of greatest concern, most of which are internal to the hospital functioning, as described above. This lack of major barriers suggests that the hospitals view their organizations as firmly in control and confident in their ability to participate in the statewide process, implement QI activities, and monitor their impact. Rather than resisting the increased focus on measuring and improving patient satisfaction, in general, hospitals are well positioned to meet the challenges required to accomplish QI, as will be explained in the following section.

Overall Hospital Approach. One of the many signs that hospitals are committed to QI is the strong support respondents noted they have from senior level staff. The general approach hospitals have taken to QI is a decentralized one in which each department or unit is responsible for identifying opportunities for improvement and implementing QI projects to effect change. Yet, the reporting of this information is centralized. Over time, the hospitals have shifted from the Pilot period with a focus on discrete quantitative goals (e.g., "not to be one star") to the period after the Public Report release when the hospitals had achieved improvement and turned to accomplishing targeted improvements identified from the survey data (e.g., address pain management issues). This shift suggests that they were incorporating a more comprehensive view of QI.

C. Key Aspects of the Statewide Public Reporting Process

In the interviews, respondents were asked about their perceptions of the statewide process for public reporting of hospital patient satisfaction. Responses concerned three aspects of the statewide process: the survey, the report, and dissemination.

The Survey. Respondents were asked their perceptions of the statewide survey process and the survey instrument. Mostly positive views were expressed about the decision-making process along with a few concerns about the survey methodology. Overall, there was widespread support for the broad goal of measuring and reporting hospital patient satisfaction. In general, the

comments were positive concerning the process; in fact, respondents at most hospitals had favorable opinions of the process. In particular, respondents mentioned that the decision-making process for the survey was "fair" and "reasonable."

A key component of the survey process was the Pilot project. Respondents at many of the hospitals indicated that the Pilot had a major impact on their QI initiatives prior to the collection of data for the first Public Report, giving the hospitals sufficient time to review their satisfaction ratings and to develop and implement improvement initiatives. However, several respondents thought that the entire process was lengthy and could be streamlined.

> *Survey Process*
> *"The value is very high, I'm not sure how to articulate it. It's extremely valuable to know this. This is the voice of our customer, and this is something we haven't really heard that well before. And I think that doing it this way, doing it with a vendor, doing this particular set of questions, having to publicly report this information, has created such an awareness and has created so much listening on our end, that I think that we're learning something really valuable here."*
>
> *"It has been an excellent process. It has taken a lot of people a lot of time. There have been healthy discussions and compromises, and a lot of improvements have come from it."*
>
> *"I am very positive about it. I think that there was a lot of provider involvement, and there were others--the State Health Department and other parties had a role in it. So actually I think that's pretty good. It reflected a lot of collaboration."*
>
> *"[It] took forever and an awful lot of people… like most things, too many people spending too much time to get it right."*
>
> *"They should be able to come in, and say: 'here's the program, tell us your objections, tell us what you don't think is appropriate for Rhode Island or your hospital, turn that around in two weeks; give me a form, get it out there.' And not take forever to interpret it, and get it back to you in a format and say 'here's what's good and bad for you, or here's a trend, a useable, information package,' and move on, and not spend your life doing that, when people have other things to do."*

Respondents also commented on the survey instrument. About half the respondents from most hospitals made positive comments concerning the instrument, for example, that it was acceptable. Those with favorable comments stated that the instrument contained reasonable questions and was credible and relevant to both patients and hospitals. These views outweighed negative comments made by fewer respondents at about half the hospitals. Negative feedback included the views that parts of the instrument were not actionable, that some domains were not relevant, and that the instrument did not always measure what was intended. The negative

comments about the survey can be explained partially by the fact that some respondents find that a patient's perception of quality care is not consistent with what nurses or physicians consider to be good quality care.

> *Survey Instrument*
> *"Well, maybe it [is] relevant to what a vendor has decided is patient satisfaction. But when I as a nurse, know that I have three days to get a patient ready to go home, that patient needs to be educated about what's the most important thing that needs to be done for the patient in the hospital. So I believe we have a fiduciary responsibility to teach that patient what quality care [is] and asking them if their meal was hot, is not leading to quality care. Did they learn about their diabetes medication? Did they learn to weigh themselves every day? That's quality care and that's what the patient should be looking for. But we're asking them the wrong kinds of questions."*
>
> *"Patient satisfaction is totally different as based on your questions. So it is an indicator for us obviously, we want our patients to be satisfied. But issues like education, we're already on board with that, we're already…working on those things. You know, changes to the physical plant, they're already in process. So those kinds of things were not usually influenced by the survey."*

Although not directly questioned about the current vendor survey instrument, more than a few expressed their opinions. Respondents were evenly divided between those with positive comments (e.g., "identifies areas important to patient"; "asks questions in a way that isn't leading a patient") and those with less favorable opinions (e.g., questions not specific enough).

The Report. Two aspects of the Public Report were mentioned by respondents: benefits of statewide public reporting, and views on the data presentation. A theme consistently voiced by key staff at all of the hospitals was that the survey results validated earlier findings and helped to support existing QI initiatives as well as to identify new areas for improvement. An additional strength of statewide public reporting, noted by fewer than half of the respondents, was that it generates "healthy competition."

> *Benefits of Public Reporting*
> *"I think it's the healthy competition and, ultimately, when there's healthy competition there's improvement. And I'll go back to the reason that we're here is the person in the bed."*

A few respondents at a few hospitals mentioned that the public reporting of this information served to raise awareness within the hospital. In a few instances, terms such as "wake-up call" or "cold slap in the face" were used to describe the response of hospital staff to their scores.

There was widespread agreement among the hospitals that the data in the Public Report were fairly presented. However, a small number of respondents did express concern about the lack of risk adjustment of scores, and a few others thought that the method for assigning diamonds tended to obscure variation among hospitals.

Data Presentation

"They've gone around a lot with trying to make it so vanilla that it doesn't tell you anything."

"To be candid, it was pretty watered down. The report was admittedly pretty bland. Everyone's two diamonds."

Another concern voiced by some respondents was that the survey process does not take into account specific differences among hospitals (e.g., specialty vs. general hospital; community vs. teaching hospital; patient population differences by age, socioeconomic status, and fluency in English; bed size). Without consideration of these factors, some thought that presenting their scores in a comparative format is unfair. A few voiced concerns about ease of understanding the vendor reports and the time it took to be trained about the reports.

Also, there were reservations expressed about the process that led to the Public Report. One consistent theme heard from respondents at many of the hospitals was concern about a methodological issue raised just prior to the release of the Public Report. (See Barr and Banks, 2002, for a discussion of methodological issues in public reports.) The discussion that ensued resulted in the addition of a statistical step to clarify and support the agreed-upon language in the Report. However, a few respondents perceived this step as demonstrating that the process was "influenced by politics" or that there was "political maneuvering."

Dissemination. Respondents commented on dissemination of the Public Report within the hospital and dissemination to the public, both patients and the community. At all the hospitals, results were usually brought to leadership and management, as well as other staff at the department level. The hospital public relations executives reported that they helped disseminate the results to staff, by posting results and reporting them through in-house newsletters. Respondents noted that the results of the Technical Report that was posted on the HEALTH website were usually not disseminated in the hospitals, although several hospitals used them to help guide QI efforts.

Regarding dissemination to the public, there were comments from about half of the hospitals that media coverage was reasonable and the story had a short "life" with little response from the media or the public. These hospital executives had expected more interest and questions from the public, but there was almost no reaction. Respondents at all of the hospitals said that they did not think the Public Report would make a difference in patient choice of hospitals. A few also said their hospitals used newsletters to provide information to the local community. All hospitals had agreed to HARI guidelines about external publicity, that is, not to use the Public Report results for marketing, although a few respondents would have preferred to do so.

Reaction from the Public to the Report

"I don't know whether the public is that interested, because nobody did really great and nobody did really poorly, I think that we found that they sort of looked at it like 'I guess they're doing okay. I'll still go wherever my doctor tells me to go to the hospital'...I don't know what impact it has on the public. I would be shocked if you surveyed a thousand Rhode Islanders and [they] said

they'd change the hospital they go to because of that survey, if they even knew about the survey."

"I'll bet you there's not a single hospital who's going to tell you it made any difference as far as patients coming in or moving from one hospital to another. That's not how a patient goes to a hospital. They go to a hospital because their doctor is at the hospital and the doctor tells them. You're almost better doing what the doctor says [and] scratch the survey!"

"I honestly don't know how useful it is [for patient choice]. There certainly wasn't a lot of talk about it on the street, you know, at cocktail parties and [places] where people usually come up to me and talk about these things."

Suggestions for Enhancing the Statewide Process. About half the respondents volunteered suggestions for improving the survey, reporting, and dissemination processes. Each suggestion came from just a few individuals, usually in the form of positive feedback. Suggestions included:

- *Survey* – continue efforts to increase response rates
- *Reporting* - keep reading level of report as simple as possible without watering down; consider reporting raw numbers and risk adjusting data; connect clinical outcomes data with patient satisfaction data
- *Dissemination* - maintain public relations involvement in all phases of hospital QI; disseminate Report more widely; advertise HEALTH website; educate the public, for example, through community forums to generate dialogue (e.g., about what quality is, purpose of Public Report, what results mean, how to interpret and use results, and differences among hospitals, such as, teaching vs. community)

Overall Process Coordination. In discussing the survey, reporting, and dissemination process, respondents from about half the hospitals made comments about the overall coordination of the statewide process. Most comments were favorable, as illustrated in the following quotes.

Statewide Process

"I think that it went very well for something of this scale that really hadn't been done before. I think there were very definite concerted efforts to involve all the hospitals, keep them updated, let them know what was going on… Provide input, feedback, so in that way I think it was very well done…I think that very definite concerted efforts were made to make this scientifically sound…and to try to keep personal opinion and politics out of it."

"…I attended quite a few meetings with the Hospital Association of Rhode Island, to determine what kind of questions will be asked, what style the reporting would take. So I was intimately involved in knowing what was going on and had a say as to how that might be."

Several respondents pointed to the key roles HEALTH and HARI played in the process, as the quotes below explain.

> *Leadership Roles*
> *" I do think the Health Department and Lieutenant Governor and the CEOs and the staff people at the hospital… First of all, philosophically, we were all on the same wavelength, that we should bring the information forward. So with that barrier out of the way, it then makes it a lot easier for people then to talk about how best to communicate this."*
>
> *"They put out RFPs, they reviewed each thing, each vendor came in, they had an opportunity to ask questions, there's lots of questions that go between the state group and the [vendor]… I mean, I think it's because of HARI that we have a good result."*

HARI's role in coordinating and facilitating the process was viewed positively; however, a few expressed feelings of not being fully included because of that role. Others noted that the process was open and inclusive and that HEALTH did a good job. A few would have liked more coordination from HEALTH, suggesting the Department take a lead in supporting collaboration among all hospitals to address key common issues in the results (e.g., emergency department).

IV. WEBSITE ACTIVITY

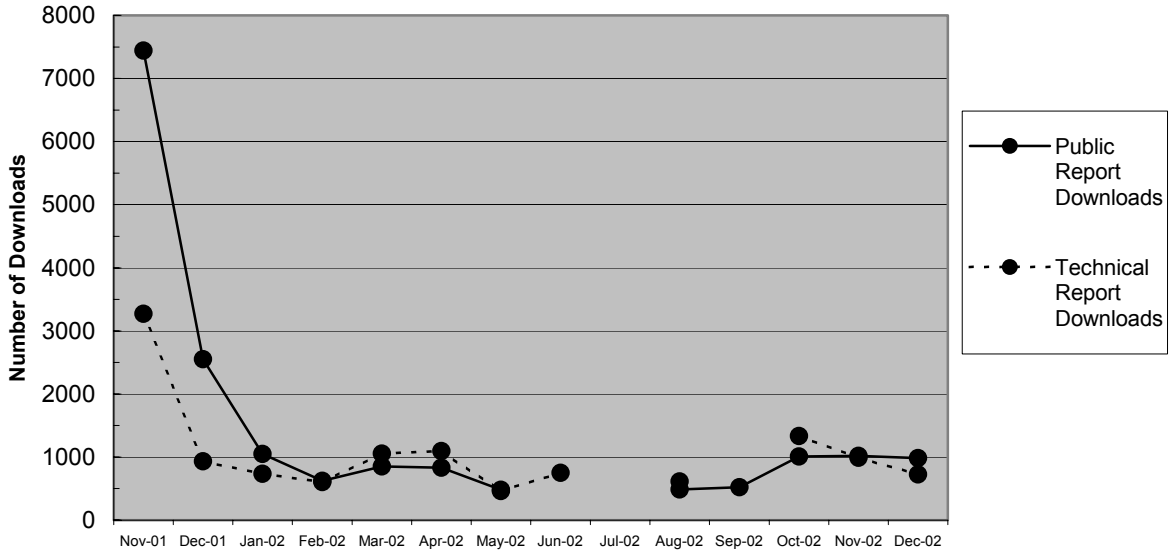
While the major focus of this evaluation was the impact of the Public Report on hospitals and their QI efforts, part of the evaluation involved using the HEALTH website to begin to assess general interest in the Public Report. At the time of the Public Report release at a press briefing held in November 2001, the Public Report on hospital patient satisfaction and the Technical Report that provided more detail about the methods and results were put on the website as PDF files (a set of tables with related data also was put on the website). Two data collection strategies were employed for this part of the evaluation: (1) using an electronic tracking system to assess the volume of activity for the PDF report files; and (2) pilot testing a user survey to learn about who downloaded the files and why.

A. Tracking Volume of Web Activity

The PDF file activity was tracked by using an existing system from November 2001 through December 2002, and by using a new system beginning in January 2003. The PDF files described in this report are: the hospital patient satisfaction Public Report and the more detailed Technical Report (see HEALTH website at *http://www.health.ri.gov/chic/performance/series.htm*). For the first 14 months, the measure reported is based on the monthly volume of downloads of the PDF files from the HEALTH website (i.e., the number of times the file was accessed). From January through June 2003, the new tracking system with additional reporting capabilities was used. Two measures are reported: the volume of downloads and the volume of unique visitors.

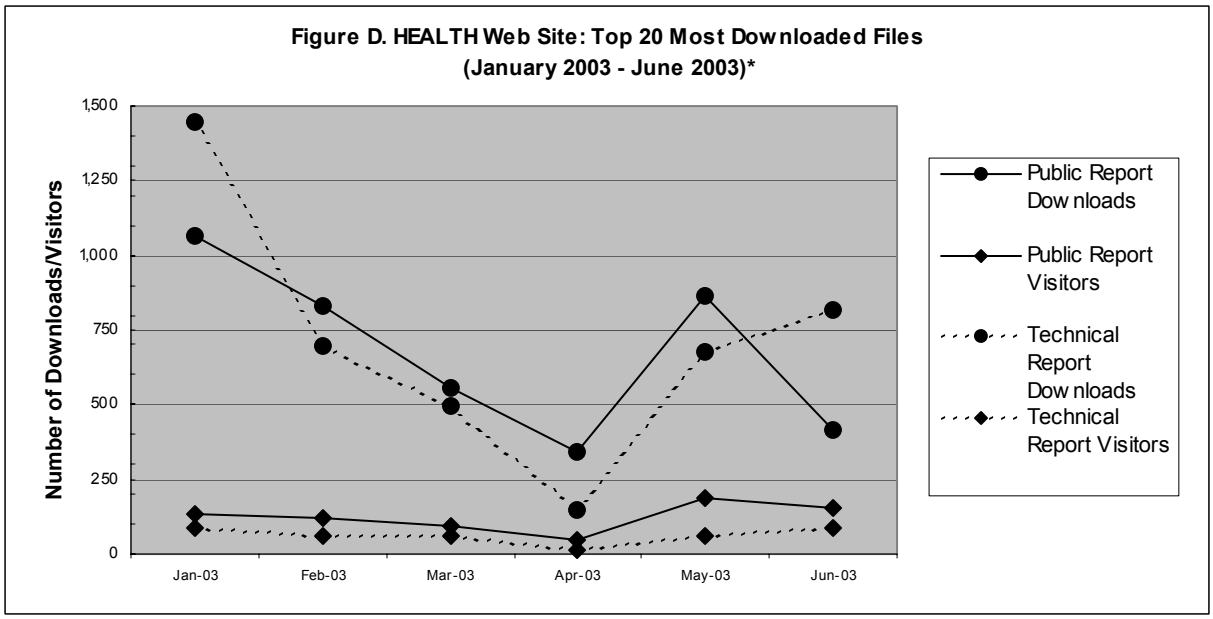
Results. In November 2001, when the Report was publicly released, there were 7,440 (19%) downloads of the Public Report, and 3,272 (8%) downloads for the Technical Report (see Figure C). Over one-fourth of all downloads was for these two files on hospital patient satisfaction. These files remained in the top 10 downloaded files through December 2002, except in June 2002 when only the Technical Report remained in the top 10, and in September 2002 when only the Public Report was in the top 10. (No data were available for July 2002.) As shown in Figure C, the two files had a high volume of activity initially. While the level of activity decreased, there has been sustained interest in these reports as evidenced by the continued placement in the top 10 most downloaded files.

Figure C. HEALTH Web Site: Top 10 Most Downloaded Files (November 2001 - December 2002)*



**Data missing for July 2002.*

Using the new web tracking system, information is available on the volume of website activity, including downloads and unique visitors (see Figure D). For the months of January through June 2003, both the Public Report and the Technical Report were in the top ten most downloaded files, with two exceptions: in April, the Technical Report was twentieth with 144 downloads and 15 visitors; and in June the Public Report was nineteenth with 412 downloads and 152 visitors. For this six-month period, the top 20 files comprised 38% to 44% of all downloaded files monthly, which totaled approximately 40,000 to 45,000 downloads each month (HEALTH Web Log Analysis Monthly Reports, January 2003 through June 2003). Although the volume of downloads for these files on hospital patient satisfaction has decreased from the initial period, these two Reports continued to be among the most downloaded files from the HEALTH website 18 months after their initial posting.



**Some missing data during March and April.*

B. Pilot Testing a Website User Survey

Because the tracking systems did not provide information on the user, a web-based survey was designed to track user characteristics and user responses to the Public Report. The survey consisted of 10 questions, including how the person heard about the survey, whether the file was read online or printed, user reaction to the Report (e.g., ease of use, helpfulness of information), reasons for reading the Report, and occupational category (e.g., HEALTH staff, provider, not employed); age and gender were included as optional items. After cognitive testing, the survey was posted on the HEALTH website at the Public Report page and the HEALTH home page for a pilot period of six weeks. A total of 12 persons went to the survey and submitted it electronically to the website vendor. Despite the small number, results suggest that the survey is easy to answer based on the responses to individual questions. The web pilot also showed that one-third of the users who responded classified themselves as health care practitioners, and half cited professional reasons (e.g., for use with patients or for quality improvement) for accessing the Public Report. This preliminary work will serve as the basis for using the survey to evaluate subsequent Public Reports available on the HEALTH website.

V. DISCUSSION AND RECOMMENDATIONS

A strength of this study is the range of perceptions that were tapped to understand how hospitals in Rhode Island have responded to the statewide initiative for public reporting of patient satisfaction. It seems clear that the mandate for public reporting, as implemented through the leadership of HEALTH in collaboration with HARI, has provided a context in which all hospitals can push forward with their QI agendas and strengthen QI by improving the patient's

experience of the hospital stay. All of the hospitals were involved in measuring patient satisfaction and in activities directed to opportunities for improvement.

A. Uses for Patient Satisfaction Data

The interview and analysis focused on the ways hospitals were using the Public Report data on patient satisfaction for QI, and several uses emerged in the results. The uses identified in this study are equivalent to those cited in a study of the use of performance information for QI by managed care organizations (Scanlon, et al., 2001). For example, it is clear from the comments of the Rhode Island respondents that data from the standardized statewide patient satisfaction survey have been used to: (1) identify and target new QI initiatives; (2) evaluate performance both over time and in comparison to other hospitals, as well as assess performance of specific units or areas within the hospital with internally developed, "homegrown" measures; (3) monitor progress in QI initiatives; (4) establish performance goals; and (5) "drill down" and identify root causes for performance that needs improvement.

While the statewide public reporting process for hospital patient satisfaction has stimulated hospital QI activity, not all hospitals have responded at the same pace. In part, this variation can be attributed to the way innovations in health care become diffused and adopted throughout the health care system. Among factors that have been reported in the literature as influencing the rate at which change is disseminated within an organization are: perceptions of the innovation, characteristics of the individuals who must adopt the change, and organizational context and managerial factors (Berwick, 2003). For example, factors associated with improvements in β-blocker use in hospitals included: shared improvement goals, substantial administrative support, and use of credible data feedback (Bradley, et al., 2001). Organizational readiness for change may require that both administrative and clinical staffs have understood and accepted the need for change (West, 1998; Weber and Joshi, 2000). Also key to facilitating the change process may be an organizational culture that supports quality improvement, allows for flexibility in implementing change, and views change positively (Shortell, et al., 1995). Factors that appear to be critical to the change process are the support and participation of hospital senior management and an organizational structure that supports quality improvement (Bradley, et al., 2003).

B. Study Limitations

The limitations of this study stem from the usual problems inherent in retrospective interviewing. The data rely on the respondent's ability to recall accurately events from the past. All respondents could speak to the period after the release of the Public Report and answer questions about its impact. However, in a few cases, interviewees were newly employed with the hospital at the time of the Pilot survey or the Public Report release; or they may have been in a different position and not involved in tasks directly related to the project until relatively recently. Because of the sequence of the surveys, and because a new survey process was under development, those interviewed sometimes had difficulty in distinguishing between the Pilot survey and the Public Report. Finally, there may be additional perspectives of other positions within the hospital, such as direct patient care staff, that were not captured in these interviews.

C. Recommendations

Overall, public reporting of comparative data has enhanced and reinforced QI efforts in hospitals in Rhode Island. This was a major goal of the legislation, and it appears that it is being achieved. The strengths of the hospital patient satisfaction survey and reporting process were also its weakness: it was highly inclusive and gave all stakeholders opportunities to provide input and genuinely influence decisions; as a result, it was time-consuming both in terms of the total amount of time of participants and in terms of the length of the process. Based on the synthesis of responses from the key hospital staff interviewed, several recommendations are offered.

- Efforts should continue to build on previous experience so that the ongoing processes of surveying and reporting hospital patient satisfaction can be improved continuously.

- More efforts are needed to promote and disseminate the report to the public so that the information is widely available. However, consumers' choice of hospitals may be limited by their health plan or insurance contract.

- Given the central importance of the physician's role in patient care and in recommending hospitalization, more attention should be focused on the dissemination of the patient satisfaction data to physicians and on their understanding of the uses of such data for quality improvement in hospitals.

- Because results reported did not show a great deal of variation across hospitals, it will be important to look at whether the level of variation remains low or begins to show greater differentiation over time. Until there is a single instrument that is used for several reporting cycles, however, this may not be possible.

- HEALTH and HARI may want to consider convening one or more "collaboratives" to address opportunities for improvement related to the same topics across several hospitals in the state. They may also want to convene workshops for QI leaders in hospitals to discuss strategies to increase clinical staff support and engagement in QI activities. Such workshops could also address improving performance related to clinical care.

- An evaluation plan for the second hospital patient satisfaction Public Report should include the online website survey, interviews with key stakeholders about the impact of this Report on the public and providers within the community (e.g., physicians, nurses), and the addition of several questions to the existing statewide general health survey to assess the views of consumers related to the Report.

This evaluation of the initial Public Report on hospital patient satisfaction in Rhode Island provides a comprehensive view of the ways that hospitals have responded to a mandated statewide reporting initiative. The Rhode Island initiative is one of the few to address public reporting of patient satisfaction in hospitals and to seek to understand its impact primarily on the hospitals, but the larger community impact as well. Similar approaches in other states, both legislated and voluntary, will begin to expand the knowledge base on the effects of public reporting of hospital quality as measured by patient satisfaction.

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Appendix B. Listing of Hospitals in the 2001 Public Report on Patient Satisfaction

Butler Hospital

Kent County Memorial Hospital

Landmark Medical Center

Memorial Hospital of Rhode Island

The Miriam Hospital

Newport Hospital

Our Lady of Fatima Hospital

Rehabilitation Hospital of Rhode Island

Rhode Island Hospital

Roger Williams Medical Center

South County Hospital

Westerly Hospital

Women & Infants Hospital of Rhode Island

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